

partments, academic institutions, international organizations, and others.

CDC's plan, "A Prevention Strategy for the United States," contains four critical goals that address, in a broader context, specific IOM recommendations for revitalizing our nation's ability to identify, contain, and most importantly, prevent illness from emerging infectious diseases [Table 2].

**1 Goal I (Surveillance)** emphasizes the improvement and expansion of surveillance capabilities for infectious diseases in the United States and internationally. Included under this goal are plans for strengthening the local and state public health infrastructures for infectious disease surveillance, establishing provider-based sentinel surveillance networks, and creating population-based Emerging Infections Prevention and Research Centers at various sites across the United States. Also included are plans for a global consortium of closely linked epidemiology/biomedical research centers to promote the detection, monitoring, and investigation of emerging infections. Other objectives under Goal I emphasize improved detection of antimicrobial resistance by better monitoring of trends in antimicrobial resistance in institutional as well as community settings; prevention of foodborne and waterborne infections; and improved knowledge of the distribution of animal reservoirs and vectors associated with human infectious diseases.

- **Goal II (Research)** focuses on applied research and the integration of laboratory science and epidemiology with public health practice. Emphasis is placed on determining how behavioral factors influence the emergence or prevention of new infections; better characterizing the health burden of both well-established and emerging infections; and evaluating the effectiveness and economic benefit of strategies to prevent emerging infectious diseases. An additional focus of Goal II is the development and application of improved laboratory techniques for the identification of new pathogens and the expanded use of molecular epidemiology in investigating emerging diseases. Improving rapid response capability and contingency plans for the emergence of new strains of known pathogens, and conducting vaccine efficacy studies are also priorities. A final focus of Goal II is the reestablishment of CDC extramural programs to ensure effective partnerships with public agencies, universities, and private industry and to promote and support research in surveillance, epidemiology, laboratory investigations, and prevention of emerging infections.

- **Goal III (Prevention and Control)** addresses the dissemination of public health information and the implementation of prevention strategies for

emerging infections. Highlighted under this goal are plans for expanded dissemination of the CDC publication, *Morbidity and Mortality Weekly Report 1 (MMWR)*, as well as other important public health information sources. Another Goal III priority is the creation of an accessible and comprehensive U.S. infectious disease database that increases awareness of infectious diseases and promotes public health action. The database will contain information on topics such as antimicrobial resistance, food borne and waterborne outbreaks, travelers' health, antimicrobial drug availability, and vaccine guidelines. Activities associated with Goal III also address issues relative to the implementation of guidelines for preventing emerging infectious diseases and the provision of critical prevention materials to state and local health departments.

- **Goal IV (Infrastructure)** deals with issues relating to infrastructure, particularly personnel and physical resources. Points of emphasis include maintaining CDC expertise in rare or unusual infectious diseases, and establishing training programs that emphasize the diagnosis of infectious diseases. A public health laboratory fellowship in infectious diseases is proposed. Also emphasized is the need for state-of-the-art physical resources—laboratory space, training facilities, and equipment. Laboratory capabilities must be maintained in a manner that optimizes flexibility and "surge capacity," so that unanticipated public health threats can be adequately and efficiently addressed. Immediate priorities include improving facilities to deal with infectious agents that require maximum microbiologic safety precautions (biosafety level 4 viruses). Goal IV also contains plans for expanding facilities for maintaining specimen banks of etiologic agents and clinical specimens, and upgrading animal care facilities and insectary space.

This plan reflects the commitment of CDC to meet the challenge of important emerging public health problems. The need to proceed rapidly is made more urgent by a number of diseases that pose an immediate danger: methicillin-resistant *Staphylococcus aureus*, a common cause of hospital infections, threatens to develop resistance to vancomycin; penicillin resistance is emerging in *Streptococcus pneumoniae*; cholera is likely to be introduced into the Caribbean islands from the current pandemic in the southern hemisphere and the new strain, *V. cholerae* 0139, is spreading throughout southern Asia; changing food industry practices and dietary choices of the American people will bring new challenges to provide a diet safe from pathogens such as *Salmonella* sp. and *E. coli* 0157:H7; and ongoing investigations of hantavirus pulmonary syndrome document that the geographic distribution of this infection is much broader than the desert Southwest. These infectious disease problems